

TRUCKEE RIVER BASIN, TRUCKEE RIVER BASIN

10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA

LOCATION.—Lat 39°23'13", long 120°05'40", in NE 1/4 NW 1/4 sec.28, T.18 N., R.17 E., Nevada County, Hydrologic Unit 16050102, on right bank, 800 ft upstream from mouth, 1,000 ft downstream from Boca Dam, and 6.2 mi northeast of Truckee.

DRAINAGE AREA.—173 mi².

PERIOD OF RECORD.—April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Prior to October 1976 published as "at Boca." Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

WATER TEMPERATURE: Water years 1993–98.

REVISED RECORDS.—WDR CA-79-3: Drainage area.

GAGE.—Water-stage recorder. Elevation of gage is 5,500 ft above NGVD of 1929, from topographic map. Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam and from computed flow over spillway.

REMARKS.—Records good. Flow regulated by Boca Reservoir (station 10344490) since 1938, Independence Lake (station 10342900) since 1939, and Stampede Reservoir (station 10344300) since 1969. There is one transmountain diversion to Sierra Valley of about 6,000 acre-ft per year.
See schematic diagram of Truckee River Basin, Lake Tahoe and Truckee River Basin.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 8,800 ft³/s, Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow for many days in many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	256	148	146	86	52	0.46	137	382	81	281	308
2	122	241	167	163	86	52	0.46	138	382	81	289	298
3	121	240	213	187	86	53	0.46	138	373	86	289	286
4	121	252	171	155	86	68	0.48	138	308	102	299	260
5	120	253	106	131	86	74	0.50	139	278	110	302	252
6	126	242	78	131	86	74	0.51	166	278	125	310	262
7	147	241	78	131	86	74	0.50	301	268	130	312	253
8	158	239	91	131	86	57	0.50	336	238	141	311	197
9	171	238	126	131	86	50	0.50	347	237	145	321	177
10	182	234	126	131	85	50	0.54	355	237	157	320	170
11	186	232	136	131	85	50	0.56	388	238	167	307	167
12	194	230	161	110	85	51	0.56	406	238	181	308	167
13	199	237	130	98	85	51	0.60	407	238	190	307	184
14	199	259	93	85	85	51	0.54	408	230	197	313	206
15	199	257	93	85	85	51	25	409	125	200	315	255
16	199	255	91	85	86	52	130	376	104	212	314	347
17	198	254	91	85	63	52	154	359	104	216	310	380
18	197	252	97	85	51	52	154	360	104	222	302	380
19	196	255	112	85	50	53	217	361	105	225	301	377
20	204	266	113	86	51	53	253	392	105	238	299	382
21	214	264	113	85	51	54	272	428	105	241	299	409
22	e240	261	113	86	51	54	284	428	105	240	297	377
23	e255	262	113	86	51	47	284	430	105	249	294	182
24	276	266	114	86	51	0.56	283	399	103	253	283	72
25	281	263	114	86	51	0.52	283	374	87	259	279	56
26	283	260	114	86	52	0.52	283	355	87	263	287	56
27	283	258	114	86	52	0.49	253	403	87	262	298	53
28	283	255	115	86	52	0.53	202	400	87	262	301	46
29	284	229	115	86	52	61	155	383	78	262	300	46
30	300	171	139	86	---	88	137	382	77	262	299	51
31	317	---	157	86	---	15	---	382	---	268	306	---
TOTAL	6387	7422	3742	3317	2048	1441.62	3376.17	10425	5493	6027	9353	6656
MEAN	206	247	121	107	70.6	46.5	113	336	183	194	302	222
MAX	317	266	213	187	86	88	284	430	382	268	321	409
MIN	120	171	78	85	50	0.49	0.46	137	77	81	279	46
AC-FT	12670	14720	7420	6580	4060	2860	6700	20680	10900	11950	18550	13200

e Estimated.

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10344500 LITTLE TRUCKEE RIVER BELOW BOCA DAM, NEAR TRUCKEE, CA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1915, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.8	38.1	29.2	83.4	75.5	196	721	790	582	169	36.5	26.3
MAX	34.2	58.4	39.3	283	173	558	1367	1260	1211	435	66.3	35.7
(WY)	1915	1913	1914	1914	1914	1914	1914	1911	1911	1911	1911	1912
MIN	14.1	28.4	23.2	20.5	28.4	56.3	106	379	212	50.7	20.1	14.4
(WY)	1914	1915	1912	1913	1912	1912	1912	1912	1913	1912	1915	1915

SUMMARY STATISTICS

WATER YEARS 1911 - 1915

ANNUAL MEAN	193		
HIGHEST ANNUAL MEAN	387		1914
LOWEST ANNUAL MEAN	94.7		1912
HIGHEST DAILY MEAN	2360	Apr 15	1914
LOWEST DAILY MEAN	.00	Sep 26	1911
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 26	1911
ANNUAL RUNOFF (AC-FT)	140100		
10 PERCENT EXCEEDS	800		
50 PERCENT EXCEEDS	49		
90 PERCENT EXCEEDS	16		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1969, BY WATER YEAR (WY)

MEAN	89.7	106	144	156	160	132	264	426	315	159	146	120
MAX	303	611	856	649	606	442	808	1647	974	389	408	414
(WY)	1968	1951	1951	1965	1963	1967	1952	1952	1967	1967	1958	1952
MIN	.000	.12	.20	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1940	1967	1960	1939	1939	1939	1939	1939	1939	1939	1939	1939

SUMMARY STATISTICS

WATER YEARS 1939 - 1969

ANNUAL MEAN	190		
HIGHEST ANNUAL MEAN	435		1952
LOWEST ANNUAL MEAN	65.8		1961
HIGHEST DAILY MEAN	5520	Dec 24	1955
LOWEST DAILY MEAN	.00	Jan 1	1939
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	1939
MAXIMUM PEAK FLOW	8800	Dec 24	1955
ANNUAL RUNOFF (AC-FT)	137700		
10 PERCENT EXCEEDS	430		
50 PERCENT EXCEEDS	107		
90 PERCENT EXCEEDS	.02		

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	116	84.4	94.9	112	88.4	121	271	466	297	202	154	119
MAX	441	327	568	1296	433	522	975	1148	1788	1131	585	418
(WY)	1972	1984	1984	1997	1997	1996	1986	1985	1983	1983	1975	1971
MIN	0.00	0.02	0.11	0.00	1.60	0.13	0.39	0.31	2.63	0.75	13.6	0.55
(WY)	1995	1991	1978	1995	1995	1995	1988	1988	1977	1981	1984	1970

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1970 - 2004

ANNUAL TOTAL	41748.13		65687.79		
ANNUAL MEAN	114		179		178
HIGHEST ANNUAL MEAN				470	1983
LOWEST ANNUAL MEAN				55.6	1992
HIGHEST DAILY MEAN	445	May 2	430	May 23	2530 Jan 9 1997
LOWEST DAILY MEAN	0.28	Jan 7	0.46	Apr 1	0.00 Sep 13 1994
ANNUAL SEVEN-DAY MINIMUM	0.32	Jan 15	0.48	Apr 1	0.00 Sep 13 1994
MAXIMUM PEAK FLOW			438	May 27	2720 Jan 8 1997
MAXIMUM PEAK STAGE			3.19	May 27	6.14 Jan 8 1997
ANNUAL RUNOFF (AC-FT)	82810		130300		128800
10 PERCENT EXCEEDS	260		318		442
50 PERCENT EXCEEDS	113		162		93
90 PERCENT EXCEEDS	0.42		51		0.59